

REMARKS

Following entry of this response, claims 1-4, 6-10, 17-19, 21-28, 30-35, 38-45 and 46-51 will be pending in the application, of which claims 1, 4, 17, 19, 24, 30, 33, 38, 43, 46 and 50 are independent.

Claim Rejections under 35 U.S.C. § 112 (Second Paragraph)

In the Office Action, the Examiner rejected claims 24, 33 and 43 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully disagrees and traverses the rejections of claims 24, 33 and 43.

The Examiner asserts that "what is included or excluded from the term 'non-standard input/output interface' is indefinite" basically because it can vary over time. Applicant respectfully requests clarification of the Examiner's position on this point. Does the Examiner contend that the applicable standard is that these terms are to be interpreted in light of the state of the art at the time the invention is made, or that some other standard applies? If the Examiner contends that a different standard applies, Applicant respectfully requests clarification of what that standard is and the legal basis for it. Once the standard applied by the Examiner is clarified, Applicant is prepared to respond accordingly.

In this regard, the Examiner is invited to telephone the undersigned to discuss this point, and the undersigned would be pleased to participate in an interview so that the issue of the applicable standard can be carefully reviewed. Alternatively, to facilitate such a discussion in person, the undersigned may designate another attorney within his firm's East Coast offices to conduct such an interview.

Claim Rejections under 35 U.S.C. §103(a)

The Examiner has rejected claims 1, 2, 4, 6-9, 17-19, 21-28, 30-33, 35 and 38-45 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,646,983 to Suffern

(hereinafter "Suffern") in view of U.S. Patent No. 5,644,593 to Bailey (hereinafter "Bailey"). Additionally, the Examiner rejected claims 3, 10 and 34 under 35 U.S.C. §103(a) as being unpatentable over the combination of Suffern and Bailey in view of U.S. Patent No. 5,640,594 to Gibson et al. (hereinafter "Gibson"). Applicant respectfully traverses the rejections of claims 1-4, 6-10, 17-19, 21-28, 30-35 and 38-45 and notes for subsequent reference the following standards for a proper §103(a) rejection.

First, all of the rejections are under 35 U.S.C. §103, or obviousness. Determining obviousness involves several factual inquiries, including (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the prior art and the claimed invention; and (4) the extent of any objective indicia of non-obviousness. *Monarch Knitting Mach. Corp. v. Sulzer Morat GMBH*, 139 F.3d 877, 881, 45 USPQ2d 1977, 1981 (Fed. Cir. 1998).

The scope and content of the prior art is determined, in part, by the invention date. Without limiting applicant's right to assert an earlier date of invention, for purposes of this discussion it will be assumed that the date of invention is the priority filing date, or April 25, 1995. To appreciate the personal computing environment of April 1995 requires several steps back in time: DOS is the dominant operating system, although Windows 3.1 is used by some users. Windows 95 will not be launched until months later, on August 24, 1995, although "pre-release" versions have been available to many developers, including PCTEL, for some time. The internet is the virtually exclusive domain of techno-geeks, and is an agglomeration of incompatible services, including Gopher, WAIS, DARPA Net, and the up-and-coming world wide web. A new piece of software, called a browser, was released a few months prior, in October 1994, by a company then known as Mosaic. The software is called Netscape. It is within this general context of the state of the art that the present invention must be evaluated.

In addition, each of the rejections is based on a combination of references. This imposes specific obligations on the examiner. "When an obviousness determination is based on multiple prior art references, there must be a showing of some 'teaching, suggestion, or reason' to combine the references", *Winner International Royalty*

Corporation v. Wang, 202 F.3d 1340; 53 USPQ2D 1580 (Fed. Cir. 2000). Further, the "absence of such a suggestion to combine is dispositive in an obviousness determination." *Id.* Such a suggestion or motivation to combine generally comes from the teachings of pertinent references, but it may also come from the nature of the problem or from the ordinary knowledge of one skilled in the art. See *In re Rouffet*, 149 F.3d at 1355, 47 USPQ2d at 1457 (Fed. Cir. 1998). The suggestion must be not merely what is feasible, but what is, on balance, desirable. **Winner**, 202 F.3d 1340; 53 USPQ.2D 1580 (Fed. Cir. 2000).

With the foregoing requirements for a Section 103 rejection in mind, Applicant respectfully traverses the rejections recited above.

It is noted that the Examiner has described Suffern as follows:

"Suffern's invention is a reduced cost modem that relies [sic: relies] on the host computer CPU for processing of the modem functions, much similar if not the same as Applicant's 'software' modem. Suffern's specification discloses sample software routines implemented on a host computer for performing modem signal processing and controlling the modem. One of ordinary skill in the art would clearly see that the software disclosed by Suffern are no more than example software routines for the engineer to 'play' with the modem. (See col. 18 lines 45-50)."

The Examiner then goes on to assert that:

"It is well known in the art that a new device needs a device driver to enable the device to be used by existing Operation System and Application programs. (See definition of 'device driver' from Whatis.com attached herein). Suffern does not disclose a device driver for the modem."

Thus, the Examiner appears to acknowledge that Suffern teaches nothing about a device driver known as a communications driver, and also teaches nothing about such a device driver providing any form of UART functionality. Instead, the Examiner appears to

rely on a citation to "Whatis.com" to provide a basis for adding these missing elements to Suffern.

However, the citation to "Whatis.com" refers to a reference that post-dates Applicant's invention by many years, and is inappropriate as the basis for any rejection. Applicant's application has a priority date of April 25, 1995, and, to serve as prior art, any discussion of device drivers must address what was known at that time. The Examiner has provided no nexus by which a "Whatis.com" excerpt from 2004 could reasonably be said to describe the state of the art in 1995. In fact, it is submitted that the "Whatis.com" site did not even exist in 1995, because the website itself states that it was not launched until September 1996. This is shown by the following excerpt from the "About us" page of the [whatis.com](http://www.whatis.com) website:

"Started as a dining room table experiment in hypertext, *whatis.com* quickly turned into a useful repository for what couldn't be easily remembered. Launched in September 1996 with 350 alphabetized words about computers and the Internet, ..."

As a result, the Examiner's reliance on such a reference is misplaced, and the reference should be withdrawn. Absent such a reference, it is unclear how the Examiner intends to argue that Bailey can be combined with Suffern. Instead, it appears to the undersigned that the Examiner would have to argue that one reading Suffern would inherently understand the desirability of, first, having a communications driver at all, and, second, having a communications driver which includes UART functionality as required by the claims. The Examiner has provided no basis for such an inherency argument, and the Examiner is requested to provide such a basis if this position is to be maintained. "In relying on the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the prior art." MPEP §2112, citing *Ex Parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

It is respectfully submitted that Bailey cannot be combined with Suffern at all, and

as a result all rejections which rely on a combination of Suffern with Bailey should be withdrawn. Since this includes all pending claims, Applicant respectfully submits that claims 1-4, 6-10, 17-19, 21-28, 30-35 and 38-45 are in condition for allowance, and respectfully request a Notice to that effect.

In addition, Applicant has submitted herewith new claims 46-51. Claim 46 addresses, and claims 47-49 which depend from it, from the perspective of a protocol translation apparatus, a first device communicating with a first protocol, and a second device communicating with the first device using a second protocol, where the second protocol includes an emulation of at least a portion of a UART protocol. This apparatus varies in structure from that already claimed, but still distinguishes over the art cited by the Examiner for at least the reasons discussed above.

In addition, claim 50, and its dependent claim 51, require a particular computer structure which includes a device coupled to an I/O slot of a bus and communicating over a substantially serial interface. In addition, a communications driver is required which comprises an emulation of at least a portion of a UART which converts access as required. Claim 51 further requires that the UART emulation cause the communications driver to access a first memory portion in response to a procedure requesting access to a register of a UART at a first port of the interface. These claims are believed to define over the cited references for at least the reasons discussed above in connection with the already pending claims, and further specifically require emulation of a UART in conjunction with a serial interface, which Bailey does not teach. As a result, claims 50 and 51 are believed to have additional bases for allowability. Early notification to that effect is respectfully requested.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition of allowance and a Notice to that effect is earnestly

solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

CHARGE STATEMENT: The Commissioner is hereby authorized to charge fees that may be required relative to this application, or credit any overpayment, to our Account ~~08-9975~~, Order No. 069509-0302131 (PCTEL-3206-1C).
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Respectfully submitted,
PILLSBURY WINTHROP
SHAW PITTMAN LLP

By: 
James E. Eakin, Reg. No. 27,874

2475 Hanover Street
Palo Alto, CA 94304-1115
Tel. No.: (650) 233-4602
Fax No.: (650) 233-4545

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